MATI-238US PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appln. No:

To Be Assigned

Applicant:

Shaomin Samuel Mo et al.

Filed:

Herewith

Title:

METHOD AND APPARATUS FOR IMPROVING ERROR RATES IN MULTI-

BAND ULTRA WIDEBAND COMMUNICATION SYSTEMS

TC/A.U.:

To Be Assigned

Examiner: Docket No:

To Be Assigned MATI-238US

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

Pursuant to 37 C.F.R. §§ 1.97 and 1.98 and to the duty of disclosure set forth in 37 C.F.R. § 1.56, the Examiner in charge of the above-identified application is requested to consider and make of record the references listed on the PTO 1449 (RP) submitted herewith. A copy of each of the non-U.S. listed references are also enclosed.

Although the information submitted herewith may be "material" to the Examiner's consideration of the subject application, this submission is not intended to constitute an admission that such information is "prior art" as to the claimed invention.

In accordance with 37 C.F.R. § 1.97(g), the filing of this Information Disclosure Statement shall not be construed to mean that a search has been made.

MATI-238US PATENT

This Information Disclosure Statement is being filed concurrently with the abovereferenced application.

Respectfully submitted,

Kenneth N. Nigon, Reg. No. 31,549 Stephen J. Weed, Reg. No. 45,202

Attorney(s) for Applicant(s)

SJW/tmb

Enclosures: PTO Form 1449

(4) References

Dated: January 28, 2004

P.O. Box 980 Valley Forge, PA 19482 (610) 407-0700

The Commissioner for Patents is hereby authorized to charge payment to Deposit Account No. 18-0350 of any fees associated with this communication.

EXPRESS MAIL

Mailing Label Number:

EL 985 026 694 US January 28, 2004

Date of Deposit:

I hereby certify that this paper and fee are being deposited, under 37 C.F.R. § 1.10 and with sufficient postage, using the "Express Mail Post Office to Addressee" service of the United States Postal Service on the date indicated above and that the deposit is addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

PTO/SB/08b (08-03) (AW 10/2003) Approved for use through 6/30/2006. OMB 0651-0031 U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Substitute for Form 1449B/PTO	te for Form 1449B/PTO Complete if Known			
	Application Number	To Be Assigned		
INFORMATION DISCLOSURE	Filing Date	Herewith		
STATEMENT BY APPLICANT	First Named Inventor	Shaomin Samuel Mo et al.		
(Use as many sheets as necessary)	Art Unit	To Be Assigned		
	Examiner Name	To Be Assigned		
SHEET 2 of 2	Attorney Docket No.	MATI-238US		

		NON-PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²
	3.	MOE Z. WIN ET AL., Comparisons of Analog and Digital Impulse Radio for Wireless Multiple-Access Comminications, IEEE International Conference on Communications, Montreal, Canada, June 1997, pgs. 91-95.	
	4.	JEFF FOERSTER ET AL., Ultra-Wideband Technology for Short- or Medium-Range Wireless Communications, Intel Technology Journal Q2, 2001, pgs. 1-11.	
	5.	SAMIR KALLEL, Analysis of a Type II Hybrid ARQ Scheme with Code Combining, IEEE Transactions on Communications, Vol. 38, No. 8, August 1990, pgs. 1133-1137.	
	6.	SAMIR KALLEL, Throughout Performance of Memory ARQ Schemes, IEEE Transactions on Vehicular Technology, Vol. 48, No. 3, May 1999, pgs. 891-899.	
		·	
Examiner	1	Date	<u> </u>

Applicant's unique citation designation number (optional).

²Applicant is to place a check mark here if English language translation is attached.

The collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 120 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Substitute for Form 1449A/PTO		Complete if Known					
	Application Number	To Be Assigned	,				
INFORMATION DISCLOSUR	Filing Date	Herewith					
STATEMENT BY APPLICANT	First Named Inventor	Shaomin Samuel Mo et al.	-				
(Use as many sheets as necessary)	Art Unit	To Be Assigned					
	Examiner Name	To Be Assigned					
SHEET 1 of	2 Attorney Docket No.	MATI-238US					
U	S. PATENT DOCUMENTS						

		SHEET			ey Docket No.	WATI-23005		
			U.S. PATE	NT D	OCUMENTS			
Examiner Initials*	Cite No.1	Document Number Number - Kind Code ^{2 (if known)}	Publication D (MM-DD-YYY		Name of Patentee or Applicant of Cited Document Golitschek Edler Von Elbwart et al.		Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear Entire Document	
	1.	US-2003/0110436 A1	06/12/2003					
	2.	US-2003/0120990 A1	06/26/2003		Elbwart et al.		Entire Document	
		US-						
		US-			`			
		US-				. ""		
		US-				· · · · · · · · · · · · · · · · · · ·	,	
		US-						
		US-						
		US-						
		US-						
		US-				· • • • • • • • • • • • • • • • • • • •		
		US-						
		US-						
		US-					100.01	
		US-						
		US-				V		
		US-				1.1		
		US-				· · · · · · · · · · · · · · · · · · ·		
		US-				······································	W-1	
		US-						
		F	OREIGN PA	TEN	L DOCUMEN.	TS		
Examiner Initials*	Foreign Patent Document		Publication Date (MM-DD-YYYY)		Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	т•	
		~		<u> </u>			-	
			<u> </u>					╁╬
			~ ~					╁
				<u> </u>				旹
				 				남
Examiner Signature				I		Date Considered		ָיַ וַ

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

Applicant's unique citation designation number (optional).

⁶Applicant is to place a check mark here if English language translation is attached.

The collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

²See Kind Codes of USPTO Patent Documents at <u>www.uspto.gov</u> or MPEP 901.04.

³Enter Office that issued the document, by the two-letter code (WIPO Standard St.3).

For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document.

⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible.